

RECEIVED  
CENTRAL FAX CENTERIN THE CLAIMS

AUG 15 2006

The following marked up listing of claims replaces all prior versions, and listings, of claims in the application.

Marked Up Listing of Claims

1. (Original) An apparatus for a communication system, comprising:

a decover element for decoving a plurality of received samples to provide recovered half-symbols, wherein the decover element is configured to perform decoving with a decoving channelization symbol having a length (T) that is half the length (2T) of a covering channelization symbol used to cover the received samples; and

a first multiplier for receiving the recovered half-symbols and pilot symbols to provide demodulated half-symbols.

2. (Original) The apparatus of claim 1, wherein the received samples are despread received samples, further comprising:

a second multiplier for producing the despread received samples.

3. (Original) The apparatus of claim 1, further comprising:

a combiner for combining the demodulated half-symbols received from the first multiplier.

4. (Original) The apparatus of claim 3, wherein the combiner comprises:

a first accumulator for accumulating the demodulated half-symbols corresponding to a first half of a symbol period; and

a second accumulator for accumulating the demodulated half-symbols corresponding to a second half of the symbol period.

5. (Original) The apparatus of claim 1, further comprising:

a switch for selectively outputting the demodulated half-symbols corresponding to a first half of the symbol period and the demodulated half-symbols corresponding to a second half of the symbol period.

ATTORNEY DOCKET NO. 000024C1

6-16 (Cancelled).

17. (Original) A communication system, comprising:

a transmitter; and

a receiver for processing a received signal transmitted from the transmitter, said receiver including:

a decover element for decoving a plurality of received samples to provide decoved half-symbols, wherein the decover element is configured to perform decoving with a decoving channelization symbol having a length (T) that is half the length (2T) of a covering channelization symbol used to cover the received samples; and

a first multiplier for receiving the decoved half-symbols and pilot symbols to provide demodulated half-symbols.

18. (Original) The communication system of claim 17, wherein the received samples are despread received samples, further comprising:

a second multiplier for producing the despread received samples.

19. (Original) The communication system of claim 17, further comprising:

a combiner for combining the demodulated half-symbols received from the first multiplier.

20. (Original) The communication system of claim 19, wherein the combiner comprises:

a first accumulator for accumulating the demodulated half-symbols corresponding to a first half of a symbol period; and

a second accumulator for accumulating the demodulated half-symbols corresponding to a second half of the symbol period.

21. (Original) The communication system of claim 17, further comprising:

a switch for selectively outputting the demodulated half-symbols corresponding to a first half of the symbol period and the demodulated half-symbols corresponding to a second half of the symbol period.

22-32. (Cancelled).

ATTORNEY DOCKET NO. 000024C1

33. (Original) A method for processing a received signal in a wireless communication system, comprising:

decovolving a plurality of received samples to provide recovered half-symbols, wherein the decovolving is performed with a decovolving channelization symbol having a length (T) that is half the length (2T) of a covering channelization symbol used to cover the received samples; and

receiving the recovered half-symbols and pilot symbols to provide demodulated half-symbols by a multiplier.

34. (Original) The method of claim 33, further comprising:  
despread the received samples.

35. (Original) The method of claim 33, further comprising:  
combining the demodulated half-symbols received from the multiplier.

36. (Original) The method of claim 35, wherein said combining further comprises:  
accumulating the demodulated half-symbols corresponding to a first half of a symbol period in a first accumulator; and  
accumulating the demodulated half-symbols corresponding to a second half of the symbol period in a second accumulator.

37. (Original) The method of claim 33, further comprising:  
selectively outputting the demodulated half-symbols corresponding to a first half of the symbol period and the demodulated half-symbols corresponding to a second half of the symbol period.